



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,434	05/04/2001	Jay K. Sheerer	10-1340	8624

23117 7590 08/26/2003

NIXON & VANDERHYE, PC  
1100 N GLEBE ROAD  
8TH FLOOR  
ARLINGTON, VA 22201-4714

EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
----------	--------------

1731

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/848,434	SHEERER	
	<b>Examiner</b>	<b>Art Unit</b>	
	Steve Alvo	1731	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Statu

- 1) ☒ Responsive to communication(s) filed on 30 May 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over CANADIAN PATENT APPLICATION 2,243,733.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over CANADIAN PATENT APPLICATION 2,243,733 with or without RICH.

CANADIAN PATENT APPLICATION 2,243,733 (Figures 3, 16A and 16B) teaches continuous annular protrusions connected to an internal section of a vessel each protrusion having a triangular cross section. The CANADIAN PATENT APPLICATION 2,243,733 teaches using impervious protrusions 53, 122, 40 (Figure 3) and 84, Figures 16A and 16B, which extend into the vessel at locations offset from the screens in portions of the vessel that are hollow. The CANADIAN PATENT also teaches that these protrusions extend 12 inches into the vessel, see Figure 20.

CANADIAN PATENT APPLICATION 2,243,733 (Figures 3, 16A and 16B) teaches continuous annular protrusions connected to an internal section of a vessel each protrusion having a triangular cross

section. The CANADIAN PATENT APPLICATION 2,243,733 teaches using impervious protrusions 53, 122, 40 (Figure 3) and 84, Figures 16A and 16B, which extend into the vessel at locations offset from the screens in portions of the vessel that are hollow. The CANADIAN PATENT also teaches that these protrusions typically extend 6 inches into the vessel (page 2, line 14) or Figure 20 shows the protrusions to extend 12 inches into the vessel. If necessary, it would have been obvious to the artisan that the step-out protrusions of CANADIAN PATENT APPLICATION 2,243,733 would be 6 inches as such is typical in the art. The CANADIAN PATENT APPLICATION 2,243,733 teaches such a design allows for "column relief", page 7, lines 18-23. If necessary, RICH teaches using a screening surface having a space from the vessel surface of  $\frac{1}{2}$  to 2 inches (column 3, lines 54-57). It would have been obvious to structure the protrusions of the CANADIAN PATENT APPLICATION 2,243,733 (Figures 3 and 16 A and B) to the depth taught by RICH so they correspond to the depth of the screens (43) in the CANADIAN PATENT. See CANADIAN PATENT APPLICATION 2,243,733, Figure 19 for triangular shaped protrusions. See Figures 12 and 13 for a perimeter defined by the protrusions of a hollow region. See Figure 13 for the screen assembly vertically offset from protrusion 82.

The argument that the protrusions of the CANADIAN PATENT is not convincing as the drawings show 53, 122, 40 (Fig. 3) and 84, Figures 16A, 16B, Figure 13 as solid lines, which would indicate that the protrusions are solid. See also CANADIAN PATENT APPLICATION 2,243,733, page 9, lines 8-10 where the conical transition sections may be continuous. See also page 9, line 1 for teaching other geometries.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-26 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The terms "having a surface area...entirely impervious"; "said annular protrusion has an inner circumference defining a perimeter of a substantially hollow region with the vessel and in the horizontal plane" and "wherein said surface area of the protrusion is impervious along the entirety of the radius of curvature" were not disclosed in the specification nor are they shown in the drawings. None of the Figures show a hollow region in a horizontal plane or an impervious protrusion "along the entire radius" of curvature.

When filing an "**Official**" FAX in Group 1730, please indicate in the Header (upper right) "**Official**" for papers that are to be entered into the file. The "**Official**" FAX phone numbers for this TC 1700 are:

**Non-Final Fax:** (703) 872-9310      **After-Final FAX:** (703) 872-9311.

When filing an "**Unofficial**" FAX in Group 1730, please indicate in the Header (upper right) "**Unofficial**" for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The "**Unofficial**" FAX phone number for this Art Unit (1731) is (703) 305-7115.

Application/Control Number:  
09/848,434  
Art Unit: 1731

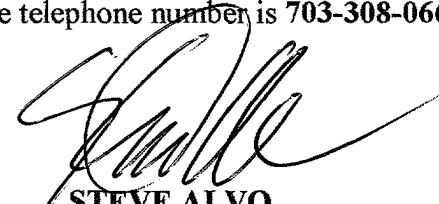
Page 5

Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is **(703) 308-2048**. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on 703-308-1164.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **703-308-0661**.

MSA  
5/2/2003



**STEVE ALVO**  
**PRIMARY EXAMINER**  
**ART UNIT 1731**